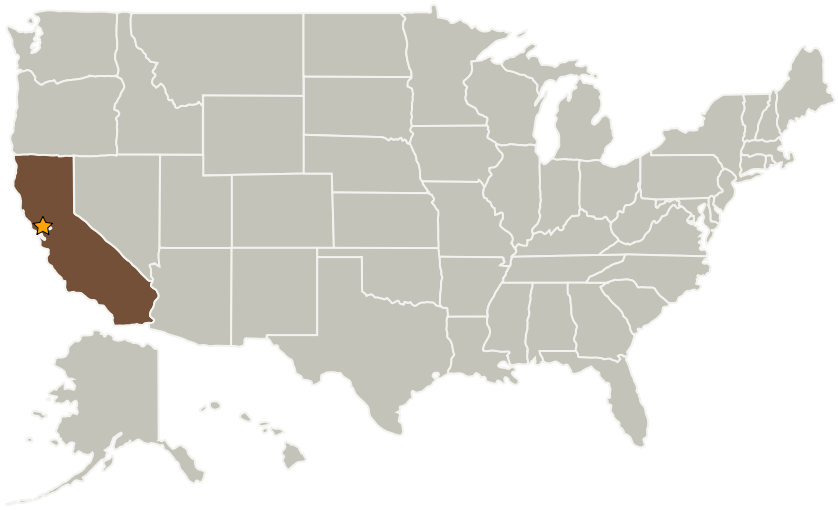
Future NAS Flight Demand Generation Tool, Phase II

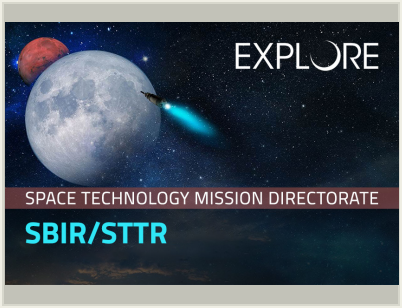
Completed Technology Project (2004 - 2006)

Project Introduction

Aviation and Air Traffic Management researchers are increasingly utilizing complex regional or NAS-wide simulations to evaluate future concepts. These analyses require many thousands of flights (a flight schedule) that are each accurately defined for every stage of the flight (a flight plan). Current methods of generating these huge input datasets are costly and time-intensive. The largely manual nature of the current process and lack of existing automation tools leaves great potential for significant errors in the data sets. We propose to develop a powerful automated system for future demand generation. This tool will be able to input a variety of existing FAA and NASA flight data sets, provide the user with extensive options on defining the future demand data set, and output new flight data sets in formats compatible with major research simulation and analysis tools. This capability will provide NASA and FAA research programs with significantly better analysis conclusions through the new ability to perform extensive sensitivity studies on new concepts to ensure they are robust to alternate potential future demand scenarios. This is crucial to ensuring the decision to proceed with a multi-million dollar Decision Support Tool development is robust to alternate future demand possibilities.

Primary U.S. Work Locations and Key Partners





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Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Ames Research Center (ARC)

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

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Organizations Performing Work	Role	Type	Location
★Ames Research Center(ARC)	Lead Organization	NASA Center	Moffett Field, California
Sensis Seagull Technology Center	Supporting Organization	Industry	Campbell, California

Primary U.S. Work Locations
California

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Technology Areas

Primary:

- TX16 Air Traffic Management and Range Tracking Systems
  - TX16.3 Traffic Management Concepts